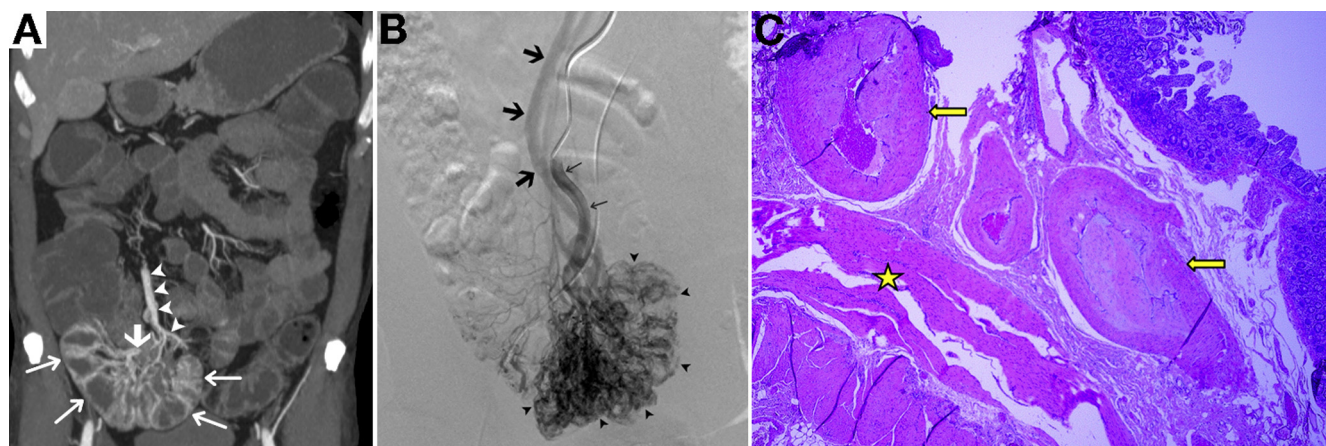


IMAGE OF THE MONTH

A Rare Cause of Intermittent, Occult Lower Gastrointestinal Bleeding

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A 56-year-old man presented with fatigue and intermittent, occult lower gastrointestinal bleeding since a percutaneous transluminal coronary angioplasty with bare metal stent implantation was performed for critical stenosis of the left anterior descending. Associated medical treatment was aspirin 80 mg and clopidogrel 75 mg daily. One episode of massive lower gastrointestinal bleeding (hemoglobin 5.0 g/dL) occurred 1 day after endoscopic polypectomy, which was treated with 6 units of packed cells.

Endoscopic work-up included a negative gastroscopy and colonoscopy. A double-balloon enteroscopy revealed pulsatile waves in the distal ileal mucosa.

Contrast-enhanced computed tomography scan revealed a hypertrophied ileocolic artery (*arrowheads*) feeding a preterminal ileal small bowel loop presenting with a hyperdense contrast enhancement (*small arrows*); early filling of a hypertrophied ileal draining vein (*large arrow*) is also seen (*Figure A*). A catheter-directed selective angiogram showed a hypertrophied ileocolic artery (*small arrows*) and end-branches (*arrowheads*) and an early draining hypertrophied ileal vein (*large arrow*) (*Figure B*), suggesting an ileal high-flow arterioportal vascular malformation. Because of the large intestinal territory the high-flow malformation was extended, it was decided to resect the affected small bowel segment.

Pathologic analysis of the resected specimen (hematoxylin-eosin; original magnification, $\times 25$) revealed a submucosal high-flow arteriovenous malformation with very large, thick-walled vessels in the submucosa (*yellow arrows*); the muscularis propria is indicated by a *yellow star* (*Figure C*). Clinical follow-up after surgery was uneventful.

High-flow arterioportal vascular malformations are extremely rare and are mostly seen as spontaneously formed vascular lesions within a hepatocellular carcinoma¹; extrahepatic arterioportal fistulas are extremely rare and can be isolated or associated with a visceral aneurysm, eroding into the portal circulation.²

Intestinal angiodysplasia is characterized by the presence of thin, ectatic vessels with little or no smooth muscle but without early draining veins.² Clinically these lesions tend to bleed intermittently, especially in patients on antiplatelet or anticoagulation drug regimens.²

In the present case, there was radiologic, macroscopic, and microscopic pathologic evidence of a high-flow arterioportal vascular malformation located in the preterminal ileum. Because of the intermittent bleeding episodes and the potential for progression to symptomatic portal hypertension and liver cirrhosis, surgical resection seemed to be justified.

These are our main findings. A small bowel high-flow arterioportal vascular malformation may cause

IMAGE OF THE MONTH, *continued*

intermittent lower gastrointestinal bleeding, especially after antiplatelet intake. Angio-computed tomography and catheter-directed angiography can demonstrate this rare disease. Surgery is a valuable treatment option.

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jejunum in patients starting dual-antiplatelet therapy just after implanting a drug-eluting coronary stent. *BMJ Case Rep* 2012; pii:bcr2012006779.

Conflicts of interest

The authors disclose no conflicts.

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